

<u>SUBJECT</u>		<u>DATE</u>
1056. Hazardous Waste Tanks and the Less than 90-Day Accumulation Time Limit	ENCORE	APR 23, 2015
1057. Decharacterized RCRA Waste - Manifesting and LDR Reporting	ENCORE	APR 30, 2015
1058. Decharacterized Hazardous Waste Listed Solely for Non-Toxic Characteristics	ENCORE	MAY 7, 2015
1059. Decharacterized Wastes, <90-Day Accumulation Time Limits and LDR Storage Prohibition	ENCORE	MAY 14, 2015
1060. Decharacterized Wastes and the LDR Dilution Prohibition	ENCORE	MAY 21, 2015
1061. Hazardous Debris Macroencapsulation and Size Reduction	ENCORE	MAY 28, 2015
1062. Universal Waste Lamps and Prohibition on Crushing		JUN 4, 2015
1063. F003 Listed Hazardous Waste and the 10% Rule	ENCORE	JUN 11, 2015
1064. F001 - F005 Listed Hazardous Waste and the 10% Rule	ENCORE	JUN 18, 2015
1065. Macroencapsulation of Hazardous Debris and Presence of Free Liquids	ENCORE	JUN 25, 2015
1066. DOT Shipping of Damaged, Defective or Recalled Lithium Batteries		JUL 1, 2015
1067. Used Oil Eligibility for Animal and Vegetable Oils	ENCORE	JUL 9, 2015
1068. Used Oil Eligibility for Petroleum Oils Mixed with Animal or Vegetable Oils		JUL 16, 2015
1069. Conditioned Exclusion for Listed Hazardous Waste Debris Treated via Extraction/Destruction	ENCORE	JUL 23, 2015
1070. Conditioned Exclusion for Characteristic Debris Treated via Immobilization		JUL 30, 2015
1071. RCRA Personnel Training and Classroom Training vs. Online Training		AUG 6, 2015
1072. PCB Decontamination Standards with No Decontamination Performed		AUG 13, 2015
1073. PCB Manifest Exceptions a.k.a. When is a PCB Manifest Not Required	ENCORE	AUG 19, 2015
1074. PCB Manifest Relief a.k.a. When is a PCB Manifest Not Required – The Sequel		AUG 27, 2015
1075. Hazardous Debris and Radioactively Contaminated Cadmium Batteries	ENCORE	SEP 3, 2015
1076. Hazardous Debris and Radioactively Contaminated Lead Acid Batteries	ENCORE	SEP 10, 2015
1077. Mercury Wet Cell Batteries - Debris or Not Debris	ENCORE	SEP 17, 2015
1078. Hazardous Debris and Non-Radioactive Lead Acid Batteries		SEP 24, 2015
1079. Unused Paraformaldehyde - U Listed Hazardous Waste or Not?	ENCORE	OCT 1, 2015
1080. CAS Numbers and the Hazardous Waste "U" and "P" Listings	ENCORE	OCT 8, 2015
1081. Universal Waste One Year Accumulation and Multiple Handlers	ENCORE	OCT 15, 2015
1082. LDR Notifications and F001-F005 Constituents of Concern	ENCORE	OCT 29, 2015
1083. LDR Notifications and F001-F005 Constituents of Concern – Again	ENCORE	NOV 5, 2015
1084. LDR Notifications and F001-F005 Constituents of Concern - One Last Time	ENCORE	NOV 12, 2015
1085. DOT and Terminal Protection of Alkaline Batteries	ENCORE	NOV 19, 2015
1086. Used Oil and Keeping Containers Closed – WAC 173-303 vs. 40 CFR 279		NOV 24, 2015
1087. PCB Weight Determinations	ENCORE	DEC 3, 2015
1088. Satellite Accumulation Requirements and Container Inspections	ENCORE	DEC 10, 2015
1089. 'Twas The Night Before Christmas - The Twenty-Third Annual Edition	ENCORE	DEC 24, 2015
1090. Satellite Accumulation and 85-Gallon Containers	ENCORE	DEC 31, 2015
1091. PCB Date Removed From Service Notations – On the Item or In a Log	ENCORE	JAN 7, 2016
1092. The Date Removed From Service Marking on the PCB Mark	ENCORE	JAN 14, 2016
1093. Generator Weekly Inspection Log Documentation – Federal vs. WA State	ENCORE	JAN 21, 2016
1094. Used Oil and Weekly Inspections	ENCORE	JAN 28, 2016
1095. TSCA/PCB Determinations for Fluorescent Light Ballasts via the Manufacture Date	ENCORE	FEB 4, 2016

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TWO MINUTE TRAINING

TO: CH2M HILL PLATEAU REMEDIATION COMPANY

FROM: PAUL W. MARTIN, RCRA Subject Matter Expert
CHPRC Environmental Protection, Hanford, WA

SUBJECT: TSCA/PCB DETERMINATIONS FOR FLUORESCENT LIGHT BALLASTS VIA THE MANUFACTURE DATE

DATE: FEBRUARY 3, 2016

<u>CHPRC Projects</u>	<u>CH PRC - Env. Protection</u>	<u>MSA</u>	<u>Hanford Laboratories</u>	<u>Other Hanford Contractors</u>	<u>Other Hanford Contractors</u>
Richard Austin Roni Ashley Tania Bates Bob Cathel Rene Catlow Richard Clinton Larry Cole John Dent Brian Dixon Eric Erpenbeck Stuart Hildreth Mike Jennings Stephanie Johansen Jeanne Kisielnicki Melvin Lakes Jim McGrogan Stuart Mortensen Anthony Nagel Dean Nester Dave Richards Phil Sheely Connie Simiele Jennie Stults Michael Waters Jeff Widney	Brett Barnes Mitch Boyd Ron Brunke Bill Cox Laura Cusack Lorna Dittmer Rick Engelmann Ted Hopkins Sasa Kosjerina Jim Leary Dale McKenney Jon McKibben Rick Oldham Linda Petersen Fred Ruck Ray Swenson Wayne Toebe Lee Tuott Daniel Turlington Dave Watson Joel Williams	Jerry Cammann Jeff Ehliis Garin Erickson Lori Fritz Panfilo Gonzales Jr. Dashia Huff Mark Kamberg Edwin Lamm Candice Marple Saul Martinez Jon Perry Thomas Pysto Christina Robison Don Rokkan Lana Strickling Lou Upton	(TBD) <u>DOE RL, ORP, WIPP</u> Mary Beth Burandt Duane Carter Cliff Clark Mike Collins Tony McKarns Ellen Mattlin Greg Sinton Scott Stubblebine	Bill Bachmann Dean Baker Scott Baker Lucinda Borneman Paul Crane Tina Crane Greta Davis Jeff DeLine Ron Del Mar John Dorian Mark Ellefson Darrin Faulk Joe Fritts Tom Gilmore Rob Gregory Gene Grohs James Hamilton Andy Hobbs Ryan Johnson Dan Kimball Megan Lerchen Richard Lipinski Charles (Mike) Lowery Michael Madison Terri Mars Cary Martin Grant McCalmant Steve Metzger Tony Miskho Matt Mills Tom Moon Chuck Mulkey Mandy Pascual Kirk Peterson Jean Quigley	Dan Saueressig Merrie Schilperoort Joelle Moss Glen Triner Greg Varljen Julie Waddoups Jay Warwick Kyle Webster Jeff Westcott Ted Wooley

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TWO MINUTE TRAINING

SUBJECT: TSCA/PCB Determinations for Fluorescent Light Ballasts via the Manufacture Date

Q: A customer at a facility in existence since the 1960's has assorted fluorescent light ballasts destined for disposal. The age of the ballasts range from the 1970's to the present. Using the manufacturer's date as opposed to analytical results, how can the customer determine which ballasts are subject to TSCA requirements and which ballasts are not?

A: [40 CFR 761.2\(a\)\(4\)](#) basically states that if the PCB concentration is not known, a person must assume that a capacitor (e.g., a fluorescent light ballast) contains ≥ 500 ppm PCBs - if the ballast was manufactured prior to July 2, 1979, or if the manufacturing date is unknown. EPA stated in the [June 29, 1998, Federal Register](#) on page 35389, bottom of 3rd column, that "*virtually all capacitors (large and small) manufactured prior to 1978 were filled with PCB fluid at a concentration near 100 percent. Capacitors manufactured after 1978 did not use PCB dielectric fluid*". [Note that the references to 1978 and July 2, 1979 are correct and not typos.]

Then, [40 CFR 761.40\(g\)](#) basically states that fluorescent light ballasts manufactured between July 1, 1978, and July 1, 1998, that do not contain PCBs must be marked with the statement "No PCBs" i.e., < 50 ppm. 40 CFR 761.2(a)(4), which provides assumptions for use but not disposal, confirms that a person may assume that a ballast marked at the time of manufacture with the statement "No PCBs" is not subject to TSCA. Also, the [June 2014 TSCA PCB Question and Answer Manual](#) states on page 41, concerning disposal of fluorescent light ballasts: "*It is acceptable to treat ballasts with this mark ["No PCBs"] as unregulated for PCBs.*"

Concerning fluorescent light ballast manufactured after July 1, 1998, these ballasts are no longer required to be marked "No PCBs". And since these ≥ 1998 ballasts were manufactured almost two decades after the PCB ban of 1978, it is safe to assume these ballasts are not PCB regulated.

SUMMARY:

- Fluorescent light ballasts manufactured:
 - ▶ Before 1978 are subject to TSCA regulation.
 - ▶ Between 1978 and 1998, and marked "No PCBs", are not subject to TSCA regulation, (other than the "No PCBs" marking requirement).
 - ▶ After 1998, and not marked "No PCBs", are not subject to TSCA regulation.

Excerpts from 40 CFR 761.40, 761.2, the PCB Q&A Manual and the 6/29/98 Federal Register are attached to the e-mail. If you have any questions, please contact me at "Paul_W_Martin@rl.gov" or at (509) 376-6620.

FROM: Paul W. Martin

DATE: 2/4/16

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TWO MINUTE TRAINING - ATTACHMENT

SUBJECT: TSCA/PCB Determinations for Fluorescent Light Ballasts via the Manufacture Date

40 CFR 761.2 PCB concentration assumptions for use.

- (a)
- (4) Any person must assume that a capacitor manufactured prior to July 2, 1979, whose PCB concentration is not established contains ≥ 500 ppm PCBs. Any person may assume that a capacitor manufactured after July 2, 1979, is non-PCB (i.e., < 50 ppm PCBs). If the date of manufacture is unknown, any person must assume the capacitor contains ≥ 500 ppm PCBs. Any person may assume that a capacitor marked at the time of manufacture with the statement "No PCBs" in accordance with §761.40(g) is non-PCB.

40 CFR 761.40 Marking requirements.

- (g) Each large low voltage capacitor, each small capacitor normally used in alternating current circuits, and each fluorescent light ballast manufactured ("manufactured", for purposes of this sentence, means built) between July 1, 1978 and July 1, 1998 that do not contain PCBs shall be marked by the manufacturer at the time of manufacture with the statement, "No PCBs". The mark shall be of similar durability and readability as other marking that indicate electrical information, part numbers, or the manufacturer's name. For purposes of this paragraph marking requirement only is applicable to items built domestically or abroad after June 30, 1978.

June 2014 Version Revisions to the PCB Q and A Manual §761.50(b)(2) PCB Items

4 Q: *Can I assume that ballasts manufactured after 1979 are not contaminated?*

A: Fluorescent light ballasts manufactured between July 1, 1979, and July 1, 1998, at the time of manufacture were required to be marked by the manufacturer with the statement "No PCBs". It is acceptable to treat ballasts with this mark as unregulated for PCBs.

11 Q: *Is a ballast manufactured before 1978 regulated for disposal?*

A: Yes. Materials containing PCBs that were disposed of or otherwise released to the environment before April 18, 1978, are generally not regulated for disposal under the current regulatory requirements. However, products manufactured before April 18, 1978, that have been in use since that time are regulated for disposal under the current requirements.

Federal Register / Vol. 63, No. 124 / Monday, June 29, 1998 / Rules and Regulations

Page 35389

"As EPA noted on August 25, 1982, in the preamble to the final rule on use in electrical equipment (47 FR 37342 at 37347), 'virtually all capacitors (large and small) manufactured prior to 1978 were filled with PCB fluid at a concentration near 100 percent. Capacitors manufactured after 1978 did not use PCB dielectric fluid'. Data was provided to EPA in support of the 1982 electrical use rule by the Edison Electric Institute (EEI) and the Utilities Solid Waste Activities Group (USWAG). This data indicated that of approximately 2.8 million large capacitors in the utilities industry, 100% contained PCBs at concentrations of 500 ppm or greater (47 FR 17426; at 17428)."

FROM: Paul W. Martin

DATE: 2/4/16

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